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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION I - NEW ENGLAND

ADMINISTRATIVE ORDER ON CONSENT FOR REMOVAL ACTION DESIGN AT THE BENNINGTON LANDFILL SUPERFUND SITE

EPA Region I Docket No. CERCLA-I-96-1014

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION I

In the Matter of:

BENNINGTON LANDFILL SUPERFUND SITE

Bennington, Vermont

Proceedings Under Sections 104(a) & (b); 106(a); and 122(a) & (d)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended 42 U.S.C. §§ 9604(a) & (b); 9606(a); and 9622(a) & (d)(3)

U.S. EPA Region I CERCLA Docket No. CERCLA-I-96-1014

ADMINISTRATIVE ORDER
ON CONSENT
FOR REMOVAL ACTION
DESIGN

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Order On Consent For Removal Action Design ("Order") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and the Respondents listed on Appendix A ("Respondents"). This Order concerns the performance of the design of a removal action by the Respondents in connection with the Bennington Landfill Superfund Site in Bennington, Vermont. This Order is issued pursuant to the authorities vested in the President of the United States by Sections 104(a) & (b); 106(a); and 122(a) & (d)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended ("CERCLA"), 42 U.S.C. §§ 9604(a) & (b); 9606(a); and 9622(a) & (d)(3). These authorities were delegated to the Administrator of EPA on January 23, 1987 by Executive Order 12580, 52 Fed. Reg. 2926 (January 29, 1987), further delegated to

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the Regional Administrator, EPA Region I, by EPA Delegation Nos. 14-14-A and 14-14-C, and redelegated by the Regional Administrator to the Director of the EPA Region I Office of Site Remediation and Restoration. This Order is part of an overall settlement effort in connection with the Bennington Landfill Superfund Site. The Parties will attempt to negotiate a judicial settlement regarding implementation of the removal action, deminimis settlement, past costs, future oversight costs, Natural Resource Damages, and EPA and the State of Vermont Department of Environmental Conservation ("VTDEC") implementation of a portion of the response action authorized by the Action Memorandum signed by the Regional Administrator on December 23, 1994.

- 2. EPA notified the State of Vermont of this action on July 24, 1995 pursuant to Sections 104(b)(2) and 106(a) of CERCLA, 42 U.S.C. §§ 9604(b)(2) and 9606(a). EPA notified the Federal Natural Resource Trustees of this action on July 20, 1995 pursuant to Section 122(j) of CERCLA, 42 U.S.C. § 9622(j).
- 3. The Respondents do not admit any liability to EPA, the State of Vermont or any other party arising out of the Site and the Respondents' participation in this Order shall not constitute or be construed as an admission of liability or of EPA's findings or determinations contained in this Order except in a proceeding to enforce the terms of this Order. The Respondents agree to comply with and be bound by the terms of this Order. The

Respondents further agree that they will not contest the basis or validity of this Order or its terms. However, in the event that the Respondents, EPA, the State of Vermont, and the <u>de minimis</u> parties identified in Appendix C have not executed a judicial settlement memorializing the overall settlement effort, as described in paragraph 1 above, by December 1, 1996, the Respondents' deadlines, liability for penalties (relating only to violations of this Order which occur after December 1, 1996), or other obligations under this Order shall cease. EPA retains the right to collect stipulated penalties which accrue on or before December 1, 1996.

II. PURPOSE

4. In entering into this Order, the mutual objectives of EPA and the Respondents are to perform the design of the selected removal action for at the Bennington Landfill Superfund Site in Bennington, Vermont, as set forth in the Action Memorandum signed by the Regional Administrator, EPA Region I, on December 23, 1994 and the Statement of Work appended to this Order as Appendix B.

III. PARTIES BOUND

5. This Order shall apply to and be binding upon EPA, the Respondents, and Respondents' heirs, successors, and assigns.

Any change in ownership or corporate status of a Respondent including, but not limited to, any transfer of assets or real or personal property shall in no way alter such Respondent's

responsibilities under this Order. Respondents are jointly and severally responsible for carrying out all activities required of them by this Order. The failure of one or more Respondent to comply with all or any part of this Order shall not in any way excuse or justify noncompliance by any other Respondent, including but not limited to the failure to perform all obligations of any defaulting Respondent.

each contractor hired to perform any work required by this Order and to each person representing any of the Respondents with respect to the Site or the work required by this Order. The Respondents or their contractors shall provide written notice of the Order to all subcontractors hired to perform any portion of the work required by this Order. The Respondents shall nonetheless be responsible for ensuring that their contractors and subcontractors perform the work contemplated herein in accordance with this Order.

IV. <u>DEFINITIONS</u>

7. Unless otherwise expressly provided herein, terms used in this Order which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Order or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

- a. "Action Memorandum" shall mean the EPA Action Memorandum relating to the Bennington Landfill Superfund Site signed on December 23, 1994, by the Regional Administrator and all attachments thereto.
- b. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 et seq.
- c. "Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.
- e. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.
- f. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, including, but not limited to, any amendments thereto.
- g. "Order" shall mean this Administrative Order On Consent For Removal Action Design and all appendices attached hereto.
- h. "Paragraph" shall mean a portion of this Order identified by an arabic numeral or an upper case letter.
- i. "Parties" shall mean EPA and the Respondents.
- j. "Removal Action" or "NTCRA" shall mean the non-time-critical removal action described in the Action Memorandum, signed by the Regional Administrator, EPA New England, on December 23, 1994, provided, however, that the term "Removal Action" or "NTCRA" shall not include those activities required by Paragraph 73 (concerning Record Preservation).
- k. "Respondents" shall mean those Parties identified in Appendix A which are responsible under the terms of this Order to carry out the requirements set forth herein.

- 1. "Section" shall mean a portion of this Order identified by a roman numeral.
- m. "Site" shall mean the Bennington Landfill Superfund Site, encompassing approximately 28 acres of land located on Houghton Lane about three miles north of the town center in Bennington, Vermont, including the areal extent of contamination and all areas in close proximity to the contamination necessary for implementation of the design of the Removal Action.
- n. "State" shall mean the State of Vermont.
- o. "Statement of Work" or "SOW" shall mean the statement of work for the design of the Removal Action, as set forth in Appendix B to this Order and any modifications made in accordance with this Order.
- p. "United States" shall mean the United States of America, including its departments, agencies and instrumentalities.
- q. "VT DEC" shall mean the State of Vermont Department of Environmental Conservation and any successor departments or agencies of the State.
- r. "Waste Materials" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); and (3) any "solid waste" under Section 1004(27) of the Solid Waste Disposal Act, as amended, 42 U.S.C. § 6903(27).

V. <u>EPA's FINDINGS OF FACT</u>

A. Site Description and History

8. The Bennington Landfill Superfund Site ("Site") is located on approximately 28 acres of land on Houghton Lane in the Town of Bennington, Vermont. The Site is located approximately three miles north of Bennington center and comprises approximately 15 acres of a 28 acre property. The Site is bordered to the north by an inactive sand and gravel pit, to the

west by Town-owned, undeveloped land, to the east by a wetland area where Hewitt Brook originates, and to the south by Houghton Lane. A map, generally depicting the Site, is attached as Appendix C.

- 9. In 1969, the Town began operating the Site where it received residential, commercial, and industrial solid and liquid wastes. The Town leased the Site property for use as a landfill from 1969 until 1985, when it purchased the Site property from the individual owner, Mr. Alden Harbour. In April 1987, the Town closed the Site and presently uses it only for transfer, recycling, and sorting operations.
- 10. Throughout the period 1969 to 1987, residential, commercial and industrial solid wastes were disposed of at the Site. From 1969 to 1975, inclusive, liquid industrial wastes were disposed of in an unlined lagoon at the Site. The Town discontinued use of the lagoon in 1975 due to concerns raised by the State regarding contamination at the Site. After attempting to solidify the liquids within the lagoon, the Town covered the lagoon with landfill material.
- 11. A buried drainage system constructed in 1976 was designed to lower the groundwater level under the Site in order to control the migration of contaminants therefrom. This drainage system discharges through a pipe or culvert ("underdrain discharge pipe") into an unlined ponded area on the eastern side

of the Site (the "drainage pond"). A surface water diversion channel was constructed by the Town in 1976 to divert surface water runoff from the western portion of the Site. Water in this diversion channel flows south along the west side of the Site and eventually drains into a wetland area located to the south of the Site.

- 12. Pursuant to a State of Vermont Solid Waste Program
 Permit, the VT DEC approved the March 25, 1989 Bennington
 Landfill Closure Plan and the Site was closed. Closure began on
 September 1, 1989 and was completed on October 16, 1990.
- 13. Waste Materials remain in the soil and groundwater at the Site. Waste Materials from the Site which have entered the groundwater have migrated, and continue to migrate, contaminating soil and groundwater in some areas to the south and east of the Site.
- 14. Pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, EPA placed the Site on the National Priorities List, 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on March 31, 1989. 54 Fed. Reg. 13,295. In accordance with the statutory requirements for NPL sites, the Agency for Toxic Substances and Disease Registry ("ATSDR") completed a Preliminary Health Assessment for the Site. The ATSDR report recommended that Site access to certain areas be restricted and private wells be monitored.

15. Since June 1991, EPA has overseen the performance of the Phase 1A and Phase 1B of the remedial investigation ("RI") by a group of potentially responsible parties ("PRPs") pursuant to an Administrative Order by Consent. On May 8, 1995, EPA disapproved the proposed RI and, at the same time, provided notice to proceed with the feasibility study ("FS"). The PRPs are currently performing the RI and FS.

B. Respondents

- 16. Respondent, Town of Bennington, Vermont, is a municipal corporation with offices in Bennington, Vermont and owned and/or operated all or a portion of the Site during a time of disposal at the Site of hazardous substances, as defined in Section 101(14) of CERCLA.
- 17. a. Respondent, B.Co., is a corporation with its principal place of business in Reno, Nevada. Respondent B.Co., formerly known as Bijur Lubricating Co. of Bennington, Vermont, owns and operates the former Bijur facility in Bennington, VT. B.Co. arranged for the disposal or treatment of hazardous substances, as defined in Section 101(14) of CERCLA, at the Site or accepted hazardous substances for transport to the Site.
- b. Respondent, Eveready Battery Company, Inc., is a Deleware corporation. Eveready Battery Company, Inc. is a wholly-owned subsidiary of Ralston Purina Company which has its principal place of business at Checkerboard Square, St. Louis, Missouri.

In June 1986, Ralston Purina Company purchased the assets of the Battery Products Division of Union Carbide Corporation, transferred those assets to Eveready Battery Company, Inc., and assumed responsibility for and agreed to indemnify Union Carbide Corporation for certain environmental liabilities which may include certain liabilities at this Site. Union Carbide Corporation and Eveready Battery Company, Inc. arranged for the disposal of hazardous substances, as defined in Section 101(14) of CERCLA, at the Site or accepted hazardous substances for transport to the Site.

- c. Respondent, Johnson Controls Battery Group, Inc., is a corporation and wholly owned subsidiary of Johnson Controls, Inc. which has a principal place of business in Milwaukee, Wisconsin. Respondent Johnson Controls Battery Group, Inc. arranged for the disposal or treatment of hazardous substances, as defined in Section 101(14) of CERCLA, at the Site or accepted hazardous substances for transport to the Site.
- d. Respondent, Textron, Inc., is a corporation with a principal place of business in Providence, Rhode Island.

 Respondent Textron, Inc. arranged for the disposal or treatment of hazardous substances, as defined in Section 101(14) of CERCLA, at the Site or accepted hazardous substances for transport to the Site.
- C. EPA and State Activities and Environmental Status of Site

- 18. In August 1974, the Town conducted a study of the leachate at the Site and numerous investigations have been conducted since 1974 by the VT DEC and the EPA. Site historical data indicates that a variety of wastes containing hazardous substances were disposed of at the Site during the late 1960's, 1970's, and 1980's and that elevated levels of volatile organic compounds ("VOCs"), semi-volatiles ("SVOCs"), polychlorinated biphenyls ("PCBs") and metals are present in shallow groundwater, underdrain discharge, and drainage pond sediments.
- inspection of the Site. Groundwater samples were collected from private and on-Site wells, and the Site underdrain discharge.

 On-Site surface water and sediment samples were also collected.

 Contamination was detected in samples collected from the Site underdrain discharge. The results indicate that VOCs, SVOCs and PCBs were not detected in private wells. Several of the on-Site monitoring wells contained VOCs and SVOCs. Benzene, ethylbenzene, toluene, xylene, naphthalene, di-n-butyl phthalate, ethyl phthalate, 2-methylnaphthalene, p-chloro-m-cresol, 4-methylphenol, and PCBs were detected in samples collected from the outflow of the underdrain discharge pipe. Nickel, lead, and arsenic were also detected in the underdrain discharge and in sediment samples.

- 20. In February 1987, the VT DEC prepared a report ("1987 VT DEC Report") entitled "Bennington Landfill, Houghton Lane, Bennington, Vermont 05201, USEPA #:VTD 981064223, Potential Hazardous Waste Site, SI, February, 1987" which recommended that a Remedial Investigation/Feasibility Study ("RI/FS") be conducted at the Site.
- 21. The Town has taken several actions to reduce the potential for the generation of leachate and migration of Waste Materials. These actions include surface water and groundwater collection and diversion measures and the installation of a VT DEC approved cap, namely, a 24-inch soil cover to minimize leachate generation by reducing infiltration from rainwater and snowmelt.
- 22. Following the Site's listing on the NPL, EPA conducted a site assessment. Contamination detected in samples collected during this investigation revealed similar results to the results of the 1986 samples reflected in the 1987 VT DEC Report. In 1993, the EPA collected samples from domestic wells adjacent to the Site. Based on testing to date, the concentration of chemicals in private wells in the vicinity of the Site do not exceed drinking water standards.
- 23. In June 1991, a group of PRPs entered into an Administrative Order by Consent to conduct and fund a RI/FS for

the Site pursuant to 40 C.F.R. § 300.430, performance of which is ongoing at this time.

- approved the initiation of an Engineering Evaluation/Cost
 Analysis ("EE/CA") on January 27, 1994, to assess various options
 for controlling and containing the source of contamination at the
 Site. The EE/CA, intended to evaluate the cost, effectiveness,
 and implementability of the various response actions to control
 the source of contamination at the Site, was conducted under EPA
 oversight by a group of PRPs (the "RI/FS PRPs") pursuant to the
 existing RI/FS Administrative Order by Consent. After the RI/FS
 PRPs submitted draft EE/CAs in April and June, 1994, EPA
 disapproved the draft EE/CA and modified certain sections. EPA
 held a public informational meeting in July 1994 to present the
 EE/CA and the EPA's preferred alternative and then held a public
 hearing on September 13, 1994 to receive oral comments.
- 25. After the public comment period, EPA issued an Action Memorandum for the Site on December 23, 1994 which represents EPA's formal decision stemming from the EE/CA process. The preferred alternative authorized by the Action Memorandum consists, of implementing a non-time-critical removal action ("NTCRA") which includes specific source control measures such as a composite barrier cap with drainage controls, cap maintenance, excavation and consolidation of soils and sediments, leachate

collection, upgradient groundwater isolation, gas management, and Site management and institutional controls.

- 26. Based on the preliminary results of the RI/FS, shallow sand and gravel groundwater contamination at the Site consists of a mappable area of trace level VOCs extending eastward away from the Site. A total of nineteen (19) VOCs were detected in the 55 shallow sand and gravel groundwater samples collected during the Phase 1A and Phase 1B of the remedial investigations. Three wells exhibited contamination which resulted in elevated risk estimates. All maximum detected concentrations of the VOCs and PCBs were above federal and state ground water quality standards in the shallow sand and gravel groundwater.
- 27. PCBs and VOCs have been detected in the shallow sand and gravel groundwater aquifer. Sediment samples collected from several seasonal water bodies were combined with surface soil samples because sediment samples from these areas are not submerged during drier periods of the year (late spring, summer, early autumn) when receptors are likely to come in contact with these sediments. Sediments from the drainage pond and the Site underdrain discharge are treated in a manner similar to surface soils because these areas are typically dry during periods of the year when receptors are most likely to come in contact with them. Polychlorinated biphenyls (Aroclor 1242) were detected in surface and subsurface soils/exposed sediments in the area of the outflow

of the underdrain discharge pipe, in the drainage pond, and in the area east of the drainage pond.

D. <u>Endangerment and Response</u>

hazardous substances at the Site is the potential for dermal contact with contaminated underdrain discharge soils and sediment by a present youth trespasser as well as the potential for ingestion of contaminated ground water by future residents. If a future resident were to consume the highest detected contaminant concentrations in shallow sand and gravel overburden ground water at a rate of 2 liters per day for 30 years, an increased chance of developing cancer of 4 in 1,000 (i.e., 4 x 10⁻³) would be expected. The evaluation of potential exposures to average sand and gravel overburden ground water concentrations in the contaminant plume (Wells B-2, B-5, B-6, B-14 and B-15) resulted in cancer risk estimates of 8 in 10,000 (i.e., 8 x 10⁻⁴), which is at the upper end of the National Contingency Plan (NCP) risk range.

Noncancer risks were evaluated by estimating a "Hazard Index (HI). Hazard Indices exceeding unity (i.e., one); indicate a greater likelihood for developing noncancer health effects. The total HI for shallow sand and gravel overburden ground water exposures was estimated at 200 and 20 for maximum and average detected concentrations, respectively.

- 29. Groundwater samples from the Site reveal that all of the hazardous substances listed in Paragraph 26 above are present in some locations at the Site at levels in excess of their Maximum Contaminant Levels ("MCLs"), non-zero Maximum Contaminant Levels Goals ("MCLGs") or Action Level (for lead), established under the Safe Drinking Water Act.
- 30. Because elevated levels of contamination remain in certain areas of the surface soils, sediments and groundwater at the Site, contaminated groundwater presents a potential threat to human health and the environment and, particularly, to future users of the groundwater in the area of contamination.

 Accordingly, residents may be exposed to contaminated drinking water through ingestion, inhalation or dermal contact.
- 31. The dangers posed to human health by the actual or threatened release of hazardous substances in, at or from the Site include, without limitation, those presented by the following hazardous substances: 1,1,1-Trichloroethane, 1-1-Dichloroethylene, 1,2-Dichloroethylene, Methylene Chloride, Benzene, Chloroethane, Tetrachloroethylene, Trichloroethylene, Vinyl Chloride, Polychlorinated Biphenyls (PCBs), Arsenic, Beryllium, Manganese, and Lead.
- 32. The Removal Action specified in the Action Memorandum signed by the Regional Administrator on December 23, 1994, and the design of the Removal Action as detailed in the Statement of

Work appended to this Order, is designed to prevent the migration of contaminated groundwater in the overburden aquifer. By preventing the migration of contaminated groundwater, this Removal Action will prevent, minimize, and/or mitigate the imminent and substantial endangerment to the public health or welfare or the environment posed by the actual or potential releases of hazardous substances from the soils and groundwater at the Site.

VI. EPA'S CONCLUSIONS OF LAW AND DETERMINATIONS

- 33. On the basis of the Findings of Fact set forth above and the administrative record supporting this Removal Action, the EPA makes the following Conclusions of Law and Determinations:
- 34. The Bennington Landfill Superfund Site is a "facility" as that term is defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- 35. Each Respondent is a "person" as that term is defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- 36. Each Respondent is a liable party within the meaning of Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).
- 37. Each substance identified in the Findings of Fact section above is a "hazardous substance" as that term is defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14). Each hazardous substance identified in the Findings of Fact above is present at the Site.

- 38. The conditions described in the Findings of Fact section above constitute an actual or threatened "release" into the "environment" within the meaning of Sections 101(8) and 101(22) of CERCLA, 42 U.S.C. §§ 9601(8) and 9601(22).
- 39. The actual or threatened releases of hazardous substances at or from the Site may pose "an imminent and substantial endangerment to the public health or welfare or the environment" within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).
- 40. The conditions present at the Site constitute a threat to public health, welfare, or the environment based upon the factors set forth in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan, as amended, 40 C.F.R. Part 300 ("NCP").
- 41. In order to protect public health and welfare and the environment, and prevent further release or threat of release of hazardous substances in, at or from the Site, expediting design of the Removal Action is necessary and appropriate. Design of the Removal Action will consist of implementation of this Order and the Statement of Work appended to this Order.
- 42. The design of the Removal Action specified in this
 Order will be done promptly and properly by the Respondents, and
 will be consistent with CERCLA and the NCP if performed in

accordance with the terms of this Order and the Statement of Work.

VII. ORDER

43. Based upon EPA's jurisdiction, the Findings of Fact, Conclusions of Law and Determinations set forth above, and the administrative record supporting this Removal Action, EPA hereby orders and the Parties agree that the Respondents shall comply with the provisions of this Order and perform all actions required by the terms and conditions of this Order.

VIII. <u>DESIGNATION OF SUPERVISING CONTRACTOR</u> <u>AND PROJECT COORDINATOR</u>

44. Within seven (7) days after the effective date of this Order, the Respondents shall retain the services of a qualified and experienced Supervising Contractor for the purpose of performing the work required by this Order in accordance with the terms and conditions of the Statement of Work. Within the same seven (7) day period, the Respondents shall notify EPA and the State in writing of the name, address, and qualifications of the proposed Supervising Contractor and the name and telephone number of the Supervising Contractor's primary contact person. The Respondents shall also notify EPA and the State of the identity and qualifications of any other contractor(s) or subcontractor(s) to be used at the Site at least fourteen (14) days in advance of their performing any work under this Order.

- 45. The Supervising Contractor shall be a qualified and certified professional engineer with substantial expertise and experience in the cleanup of hazardous waste sites. EPA reserves the right to disapprove any contractor or subcontractor or other person engaged directly or indirectly by the Respondents to conduct work activities under this Order. If EPA disapproves the selection of any proposed contractor, the Respondents shall notify EPA and the State in writing of the name, address, and qualifications of another contractor within fourteen (14) days after receipt of the notice of disapproval.
- 46. Within seven (7) days after the effective date of this Order, the Respondents shall designate a Project Coordinator who shall be responsible for administration of all of the Respondents' actions called for by this Order, and shall submit the designated coordinator's name, address, and telephone number to EPA and the State. The Respondents' Project Coordinator shall be subject to disapproval by EPA and shall have the technical expertise sufficient to adequately oversee all aspects of the work required under this Order. The Respondents' Project Coordinator shall not be an attorney for any of the Respondents in this matter.
- 47. EPA will deem the Project Coordinator's receipt of any notice or communication from EPA relating to this Order as receipt by the Respondents.

IX. <u>DESIGNATION OF EPA COORDINATOR</u>

- EPA will designate a Remedial Project Manager ("RPM") for administration of its responsibilities for oversight of the day-to-day activities conducted under the Order, and for receipt of all written matter required by the Order. In addition, EPA will designate a Geographic Section Chief ("GSC") who will be responsible for all the findings of approval/disapproval, and comments on all major project deliverables. The State will designate a State Site Manager ("SSM") for receipt of all written matter required to be submitted to the State hereunder. submit the name, address, and telephone number of the RPM and GSC to the State and the Respondents within seven (7) days after the effective date of this Order. The State will submit the name, address, and telephone number of the SSM to EPA and the Respondents within seven (7) days after the effective date of this Order. Receipt of any notice or communication by the RPM from the Respondents' Project Coordinator shall be deemed receipt by EPA and receipt of any notice or communication by the SSM from the Respondents' Project Coordinator shall be deemed receipt by the VT DEC.
- 49. EPA's RPM shall have the authority vested in the Remedial Project Manager and the On-Scene Coordinator by the NCP, including but not limited to the authority to halt, conduct, or direct any work required by this Order, or to direct any other

response actions undertaken at the Site. Absence of the RPM from the Site shall not be cause for stoppage of work unless specifically directed by the RPM.

- X. REMOVAL WORK DESIGN TO BE PERFORMED; COMPLETION OF DESIGN WORK
- 50. Upon retention of the Supervising Contractor, the Respondents shall commence the work detailed in the Statement of Work to perform the design of the Removal Action. The Removal Action shall be designed to meet the Performance Standards specified in the Action Memorandum and the SOW. As detailed in the Statement of Work, and subject to the condition set forth in the preceding sentence, the Respondents shall design:
 - a. a composite barrier low permeability cap with drainage controls;
 - b. a plan for the excavation of contaminated soils and sediments exceeding action levels from the drainage pond and underdrain discharge pipe area and for the consolidation of such soils and sediments with the existing landfill;
 - c. a plan for a gas management system;
 - d. a plan for air monitoring as part of the Demonstration of Compliance Plan activities to verify that no air emissions occur which exceed applicable or relevant and appropriate state or federal limits;
 - e. a plan for a system to collect leachate and groundwater from the existing underdrain discharge and treat it off-site to remove contaminants, or treat it in some other manner previously approved by EPA under this Order and the SOW; and
 - f. a plan for a structure to isolate groundwater from areas upgradient of the Site.

All work performed by the Respondents shall be conducted in accordance with CERCLA, the NCP, applicable guidance documents provided by EPA, and the provisions of this Order including any standards, specifications, and time schedules contained in the Statement of Work or specified by the RPM.

XI. MODIFICATION OF THE SOW OR RELATED WORK PLANS

- 51. If EPA determines, after a reasonable opportunity for review and comment by the State, that modification to the work specified in the SOW and/or in work plans developed pursuant to the SOW is necessary to design the Removal Action so that it will achieve and maintain the Performance Standards specified in the Action Memorandum and the SOW, EPA may require that such modification be incorporated into the SOW and/or such work plans. Provided, however, that a modification may only be required pursuant to this Paragraph to the extent that it is consistent with the scope of the response action selected in the Action Memorandum.
- 52. For purposes of this Section XI only, the "scope of the response action selected in the Action Memorandum" addressed by this Order is design of: Containment and isolation of Waste Materials, collecting and disposing of underdrain discharge, and minimization of migration of contamination from the source area.
- 53. If Respondents object to any modification determined by EPA to be necessary pursuant to this Paragraph, they may seek

dispute resolution pursuant to Section XXII (Dispute Resolution). The SOW and/or related work plans shall be modified in accordance with the final resolution of the dispute.

- 54. Respondents shall implement any work required by any modifications incorporated in the SOW and/or in work plans developed pursuant to the SOW in accordance with this Paragraph.
- 55. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions as otherwise provided in this Order.

XII. PROGRESS REPORTS

- 56. By the fifteenth day of each calendar month until termination of this Order, the Respondents shall submit to the EPA and the VT DEC two copies each of a written, monthly progress report concerning activities undertaken by the Respondents pursuant to this Order. These reports shall describe all significant developments during the preceding month, including but not limited to the following:
 - a. A description of work performed and any problems encountered as well as the developments anticipated during the next calendar month, including the work to be performed, anticipated problems, and planned resolutions of past or anticipated problems;
 - b. A summary of all results of validated sampling and tests received or generated by the Respondents or their contractors or agents pursuant to this Order in the previous month;
 - c. Identification of all NTCRA design submittals and other deliverables required by the Order that were completed and submitted during the previous month;

- d. Information regarding unresolved delays encountered in the previous month or anticipated during the next month that may affect the future schedule for implementation of the NTCRA and a description of efforts made or to be made to mitigate those delays or anticipated delays;
- e. Any modifications to the NTCRA plans or other schedules that Respondents have proposed to EPA or that have been approved by EPA, after a reasonable opportunity for review and comment by the State; and,
- f. A description of activities undertaken in support of the Community Relations Plan during the previous month and those to be undertaken in the next month.

If requested in writing by EPA, the Respondents also shall provide briefings for EPA and the State to discuss the progress of the design of the NTCRA.

XIII. <u>DELIVERABLES SUBMITTED</u> TO EPA

- 57. For deliverables, plans, reports or other items ("Deliverables") which require EPA approval as specified in this Order or the SOW, the Respondents shall comply with the procedures set forth in Section XIII.A. below. For Deliverables which require the Respondents' certification as specified in the SOW, the Respondents shall comply with the procedures set forth in Section XIII.B. below. If reasonably commercially available, any plan, deliverable, report or other item submitted to EPA for approval pursuant to this Order shall be printed on recycled paper containing at least 30% post-consumer content which shall be so noted on each document.
- 58. For all Deliverables, the Respondents shall submit such copies to EPA and the State as specified by the RPM. All

Deliverables submitted to EPA or the State pursuant to this Order shall be dated and shall include, in a prominent location in the document, the following disclaimer: "Disclaimer: This document has been prepared pursuant to a government administrative order (U.S. EPA Region I Docket No. CERCLA-I-96-1014) and has not received final acceptance from the U.S. Environmental Protection Agency. The opinions, findings, and conclusions expressed are those of the authors and not those of the U.S. Environmental Protection Agency." In addition, any such Deliverable which requires EPA approval pursuant to Section XIII.A. below and which has not received final approval from EPA shall be marked "Draft" on each page.

A. <u>Deliverables Requiring EPA Approval</u>

- 59. After review of any Deliverable which the Respondents are required to submit for approval pursuant to this Order and Statement of Work, EPA, after reasonable opportunity for review and comment by the VT DEC, may:
 - a. Approve the Deliverable;
 - b. Approve the Deliverable upon specified conditions;
 - c. Disapprove the Deliverable and notify the Respondents of deficiencies;
 - d. Disapprove the Deliverable and modify the Deliverable itself to cure any deficiencies; or
 - e. Any combination of the above.

A finding of approval or approval upon conditions shall not be construed to mean that EPA concurs with all conclusions, methods, or statements in the deliverables. In the event of EPA approval, approval upon conditions, or modification by EPA, pursuant to (a), (b), (d), or (e) above, the Respondents shall perform all actions required by the submission, as approved or modified by EPA. In the event of EPA modification, pursuant to (d) or (e) above, the Respondents agree to reimburse EPA for the costs of such modification or work as an oversight cost.

deficiencies pursuant to (c) or (e) above, the Respondents shall correct the deficiencies and resubmit the Deliverable within fourteen (14) days or such other time period specified in the notice of disapproval. Notwithstanding a notice of disapproval, the Respondents shall proceed to take any action required by any non-deficient portion of the Deliverable if not dependent upon approval of the deficient portion of the deliverable, as determined by EPA, after a reasonable opportunity for review and comment by the State. If EPA does not approve the Deliverable as resubmitted, Respondents shall be in violation of the Order and subject to stipulated penalties pursuant to Section XXIII of this Order. Upon receipt of a notice of disapproval with deficiencies pursuant to (c) or (e) above with respect to the Conceptual Design Letter Report, Intermediate Design Letter Report, 100%

NTCRA Design, and Demonstration of Compliance Plan, Respondents shall be in violation of the Order and subject to stipulated penalties both at the time of EPA's initial issuance of a disapproval with deficiencies and if EPA does not approve the Deliverable as resubmitted.

B. <u>Deliverables Requiring Respondents' Certification</u>

as specified in the SOW shall be certified by the Respondents as provided below. Upon submittal to EPA, the Respondents shall proceed with the next scheduled activity consistent with the Deliverable without further notification or approval by EPA. Each such Deliverable shall include the following certification signed by the Respondents' Project Coordinator:

"I certify, to the best of my knowledge and professional judgment, and after appropriate inquiries of all relevant persons involved in the preparation of this Deliverable, that all guidance documents specified in Attachment 1 of the SOW which relate to this Deliverable were reviewed in preparation of this Deliverable. I further certify that the contents of this Deliverable complies with the requirements of the SOW, Attachment 1 thereto, and all guidance documents specified in Attachment 1 which relate to this Deliverable. I am aware that EPA may assess stipulated penalties for submission of a Deliverable that is not in compliance with the requirements of the SOW, Attachment 1 thereto, and all guidance documents specified in Attachment 1 to the SOW which relate to this Deliverable."

62. EPA, at its discretion, may provide comments to the Respondents concerning any Deliverable requiring Respondents' certification, and may disapprove the Deliverable and notify the

Respondents of deficiencies. Before taking any action under this Paragraph, EPA shall provide the State with a reasonable opportunity for review of and comment on such action. Upon receipt of a notice of disapproval with deficiencies, the Respondents shall correct the deficiencies and resubmit the Deliverable within fourteen (14) days or such other time period specified by EPA in the notice of disapproval. Notwithstanding a notice of disapproval, the Respondents shall proceed to take any action required by any non-deficient portion of the Deliverable. If EPA disapproves the Deliverable as resubmitted, the Respondents shall be in violation of the Order and subject to stipulated penalties pursuant to Section XXIII of this Order.

XIV. <u>INCORPORATION AND ENFORCEABILITY OF DOCUMENTS</u>

63. The Statement of Work and all other appendices or attachments to this Order shall be deemed incorporated into, and made an enforceable part of, this Order. Upon approval by EPA pursuant to the procedures of Section XIII.A., or upon certification by the Respondents pursuant to Section XIII.B., whichever applies, all Deliverables required by or developed under this Order shall be deemed incorporated into, and made an enforceable part of, this Order. In the event of conflict between this Order and any document attached to, incorporated into, or enforceable hereunder, the provisions of this Order shall control.

XV. SITE ACCESS

- 64. Respondent Town of Bennington hereby agrees to provide access to, use of, or easements on the Site, to the Respondents, the United States, the State, and their representatives including, but not limited to EPA, the VT DEC and any EPA or VT DEC contractors, for purposes of: overseeing and implementing the work required under this Order, the SOW, and the Action Memorandum; implementing any monitoring of the groundwater, surface water, air, sediments, or soils at the Site; and overseeing and implementing any additional response actions at the Site. Respondent Town of Bennington shall provide such access to the Site consistent with the requirements of the Action Memorandum and the SOW.
- easements over property other than the Site is required for the proper and complete implementation of this Order, the Respondents shall use their best efforts to obtain access agreements or other interests in the property, in writing, sufficient to allow implementation of this Order within thirty (30) days after the Order's effective date. For purposes of this paragraph, "best efforts" include but are not limited to the payment of reasonable sums of money in consideration of access to property.
- 66. Such written access agreements or other interests other than the Site obtained pursuant to the preceding paragraph shall

provide Respondents, the United States and the State and their representatives, including, but not limited to EPA, VT DEC and their contractors, access to any such areas at all reasonable times for purposes of implementing and monitoring work under this Order. Such written access agreements or other interests shall specify that the Respondents are not representatives or agents of the United States or the State with respect to liability associated with the Site.

- 67. In the event that access agreements or other interests sufficient for implementation and monitoring of work under this Order are not obtained within the time period specified above, the Respondents shall notify EPA and the State in writing within three (3) days thereafter regarding the lack of such agreements and the efforts made by the Respondents to obtain them. Lack of access shall not excuse or justify failure to perform any activity or to meet any deadline not requiring or directly dependent upon such access.
- 68. EPA may, as it deems appropriate, assist the Respondents in obtaining access agreements. The Respondents shall reimburse EPA for all costs incurred by EPA in obtaining access, including, but not limited to, attorneys fees and the amount of just compensation.

XVI. QUALITY ASSURANCE/SAMPLING

- 69. The Respondents shall submit to EPA and the State, upon receipt, the results of all sampling or tests and all other data generated by the Respondents, their contractor(s), or on the Respondents' behalf in the course of implementing this Order. The Respondents shall also provide the quality assurance/quality control procedures followed by all sampling teams and laboratories performing data collection and/or analysis.
- 70. Upon request, the Respondents shall allow EPA, the State or their authorized representatives to take split and/or duplicate samples of any samples collected by the Respondents while performing work under this Order. The Respondents shall notify EPA and the State in writing not less than twenty-one (21) days in advance of any sample collection activity. In addition, EPA and the State shall have the right to take any additional samples that they deem necessary.
- 71. The Respondents shall assure that EPA, the State and their authorized representatives are allowed access to any laboratory utilized by the Respondents in implementing this Order. Upon request, the Respondents shall have a designated laboratory analyze samples submitted by EPA or the State for quality assurance monitoring.

XVII. <u>ACCESS TO INFORMATION; RECORD PRESERVATION;</u> CONFIDENTIALITY CLAIMS

72. Upon request, the Respondents shall provide EPA and the State with copies of all records, documents, and other

information generated by the Respondents and their contractor(s) which relate in any way to the Site or to the implementation of this Order, including but not limited to, sampling and analysis records, field sheets and field notes, engineering logs, chain of custody records, bills of lading, trucking logs, manifests, receipts, reports, and correspondence. In addition, the Respondents' employees, agents, or representatives with knowledge of facts concerning the conditions at the Site or performance of work under this Order shall be made available to EPA and the State to provide such information.

73. For a period of at least six (6) years following notification by EPA that the Respondents have completed the design of the Removal Action in accordance with this Order, the Respondents shall preserve all documents, records, and information of whatever kind, nature or description in their possession and/or control or that of their officers, employees, agents, accountants, contractors, attorneys, successors and assigns, that relate in any way to the performance of work under this Order, or relate in any way to releases or threatened releases of hazardous substances which are the subject of the design of the Removal Action addressed by this Order. After this six (6) year period has expired, the Respondents shall provide EPA and the State with sixty (60) days advance written notice prior to the destruction of any such records, documents, or

information. The Respondents shall send such notice, accompanied by a copy of this Order, to:

Regional Counsel
Office of Regional Counsel
U.S. Environmental Protection Agency
J.F.K. Federal Building
Boston, Massachusetts 02203

Re: Removal Action at Bennington Landfill Superfund Site, Docket No. CERCLA-I-96-1014

and

Office of the Attorney General 109 State Street Montpelier, VT 05609-1001

Upon request, the Respondents shall provide to EPA and the State copies of all such records, documents, or information.

74. The Respondents may assert a confidentiality claim, if appropriate, covering part or all of the information required by or requested under this Order, pursuant to Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b) (1989). The Respondents shall adequately substantiate all such assertions. Analytical and other data shall not be claimed as confidential by the Respondents. Information determined to be confidential by EPA, after a reasonable opportunity for review and comment by the State, will be afforded the protection required by Section 104(e)(7) of CERCLA and by 40 C.F.R. Part 2, Subpart B. If no confidentiality claim accompanies the information when submitted to EPA, EPA may make it available to the public without further notice to the Respondents.

XVIII. CREATION OF DANGER; EMERGENCY RESPONSE

- 75. Upon the occurrence of any incident or change of conditions during the activities conducted pursuant to this Order that causes or threatens a release of hazardous substances from the Site or an endangerment to the public health or welfare or the environment, the Respondents shall immediately take all appropriate action to prevent, abate or minimize such release or endangerment. The Respondents shall also immediately notify the RPM or, in the event of her or his unavailability, shall notify the Regional Duty Officer of the Emergency Planning and Response Branch, EPA Region I, telephone 617-223-7265. In addition, the Respondents shall also notify the Vermont DEC Emergency Response Program at telephone no. 1-800-641-5005. In taking any actions under this paragraph, the Respondents shall act in accordance with all applicable provisions of the Health and Safety Plan prepared pursuant to the Statement of Work.
- 76. The Respondents shall submit a written report to EPA and the State within seven (7) days after each incident specified above, setting forth the events that occurred and the measures taken and to be taken to mitigate any release or endangerment caused or threatened by the incident and to prevent the reoccurrence of such an incident.
- 77. Nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment

or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site.

XIX. OFF-SITE RULE

- 78. All hazardous substances, pollutants or contaminants removed off-Site pursuant to this Order for treatment, storage, or disposal shall be treated, stored, or disposed of at a facility in compliance with Section 121(d)(3) of CERCLA and Section 300.440 of the NCP, as determined by EPA. To the extent any hazardous substances, pollutants or contaminants to be removed off-Site also constitute a "hazardous waste" as defined in §7-103 of the Vermont Hazardous Waste Management Regulations, effective August 15, 1991, the Respondents shall comply with the manifesting requirements of § 7-306 of said regulations.
- 79. The Respondents shall, prior to any off-Site shipment of Waste Materials from the Site to an out-of-state waste management facility, provide written notification of such shipment of Waste Materials to the appropriate state environmental official in the receiving facility's state, and to the EPA Project Coordinator and the Vermont DEC Project Manager. However, this notification requirement shall not apply to any off-Site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

80. The Respondents shall include in the written notification the following information: (a) the name and location of the facility to which the Waste Materials is to be shipped; (b) the type and quantity of the Waste Materials to be shipped; (c) the expected schedule for the shipment of the Waste Materials; and (d) the method of transportation. The Respondents shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Materials to another facility within the same state, or to a facility in another state.

XX. FINANCIAL ASSURANCE; INSURANCE

- 81. Within thirty (30) days after the effective date of this Order and annually thereafter until notification by EPA that the Respondents' design obligations under the SOW have been completed, one (1) or more of the Respondents shall submit to EPA a demonstration that they meet one (1) of the financial assurance mechanisms specified in 40 C.F.R. § 264.143 for the estimated costs of work to be performed by the Respondents under this Order.
- 82. At least seven (7) days prior to commencing any on-Site work under this Order, the Respondents shall secure, and shall maintain for the duration of this Order, comprehensive general liability and automobile insurance with limits of three million dollars (\$3,000,000), combined single limit. The United States

shall be named as an additional insured for all such insurance In the event any insurer makes money available to any of the Respondents to compensate for a loss caused by harm to the environment or an accident occurring during the performance of activities conducted by the Respondent under this Order, such insurance money shall first be used to remedy the environmental harm before being allocated to or spent on any other expenses or for any other purposes. Within the same time period, the Respondents shall provide EPA with certificates of such insurance and a copy of each insurance policy. If the Respondents demonstrate to EPA that any contractor or subcontractor maintains insurance equivalent to that described above or insurance covering the same risks but in a lesser amount, then the Respondents need provide only that portion of the insurance described above which is not maintained by the contractor or subcontractor.

XXI. FORCE MAJEURE

83. The Respondents agree to perform all requirements under this Order within the time limits established under this Order, unless the performance is delayed by force majeure. For purposes of this Order, force majeure is defined as any event arising from causes beyond the control of Respondents or of any entity controlled by Respondents, including but not limited to their contractors and subcontractors, that delays or prevents

performance of any obligation under this Order despite Respondents' best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the work or a failure to attain the Performance Standards. In the event that circumstances occur which the Respondents assert were caused by a force majeure event, as soon as possible but in no event later than three (3) working days of such occurrence, the Respondents shall orally notify the EPA RPM and the Vermont DEC Project Manager and shall identify with specificity the cause and the estimated duration of such delay. Within five (5) working days after such circumstances, the Respondents shall supply to EPA and the State in writing an explanation of the cause(s) of any actual or expected delay or noncompliance, the anticipated duration of any delay, the measures taken and to be taken by the Respondents to prevent or minimize the delay or correct the noncompliance, and the timetable for implementation of such Failure to notify EPA and the State in a timely manner shall result in a waiver of the Respondents' right to assert that the delay should be excused under the terms of this Section.

84. If EPA determines, after a reasonable opportunity for review and comment by the State, that a delay in performance of a requirement under this Order is or was attributable to a force majeure event, the time period for performance of that requirement shall be extended as deemed necessary by EPA, after a

reasonable opportunity for review and comment by the State. Such an extension shall not alter Respondents' obligation to perform or complete other tasks required by the Order which the EPA determines, after a reasonable opportunity for review and comment by the State, are not directly affected by the force majeure event.

XXII. <u>DISPUTE RESOLUTION</u>

If the Respondents object to any EPA decision made pursuant to this Order, including any decision which has resulted in the assessment of stipulated penalties, the Respondents shall notify EPA and the State in writing of their objections within ten (10) days of receipt of the notice of such decision. the Respondents shall communicate on the disputed matter and shall have thirty (30) days from the receipt by EPA of the notification of objection to reach agreement. If agreement cannot be reached on any issue within this thirty (30) day period, EPA, after a reasonable opportunity for review and comment by the State, shall thereafter provide a written statement of its decision to the Respondents and the Respondents shall implement the activities required by the EPA decision beginning no later than five (5) days after receipt of the EPA statement. Except as specifically provided herein, engagement of dispute resolution among the parties shall not be cause for the delay of any work. No EPA decision made pursuant to this Section

shall constitute a final agency action giving rise to judicial review.

86. In the event that the Respondents do not implement the activities required by the EPA decision, the Regional Administrator may take such civil enforcement actions against the Respondents as may be provided by statutory or equitable authorities, including, but not limited to, the assessment of such civil penalties or damages as are authorized by Sections 106, 107, 109 and 122 of CERCLA. In such an event, EPA retains the right to perform the design of the Removal Action pursuant to its authority under CERCLA and to recover the costs thereof from the Respondents.

XXIII. STIPULATED PENALTIES

87. The Respondents shall be liable for stipulated penalties in the amounts set forth in this Section to EPA for failure to comply with the requirements of this Order specified below, unless excused under Section XXI (Force Majeure) or Section I, Paragraph 3 of this Order. "Compliance" by the Respondents shall include but not be limited to the timely and adequate submission of Deliverables and performance of activities under this Order in accordance with all applicable requirements of law, this Order, the SOW, and any Deliverables approved by EPA or certified by the Respondents pursuant to this Order.

88. The following stipulated penalties shall be payable per violation per day to EPA for any noncompliance including but not limited to failure to submit timely or adequate Deliverables including, but not limited to, the Conceptual Design Letter Report, Intermediate Design Letter Report, 100% NTCRA Design, NTCRA Implementation Schedule, Demonstration of Compliance Plan, and Health and Safety Plan:

Penalty Per Violation Per Day	Period of Noncompliance
\$ 1,500	1st through 14th day
\$ 3,000	15th through 30th day
\$ 5,000	31st day and beyond

89. The following stipulated penalties shall be payable per violation per day to EPA for failure to submit timely or adequate progress reports, financial assurance documentation, or to provide access pursuant to the SOW and this Order:

Penalty Per Violation Per Day	Period of Noncompliance
\$ 750	1st through 14th day
\$ 1,500	15th day and beyond

90. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Order.

- 91. Following EPA's determination that the Respondents have failed to comply with a requirement of this Order, EPA may give the Respondents written notification of the same and describe the noncompliance. EPA may send the Respondents a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified the Respondents of a violation, except that any daily penalties shall not accrue for any noncompliance occurring after the thirtieth day of noncompliance until EPA has provided Respondents with notice of noncompliance pursuant to this Paragraph. Any EPA failure to notify Respondents of any noncompliance under this Order shall only affect the daily accrual of stipulated penalties with respect to the particular noncompliance for which notice has not been provided but not the accrual of penalties with respect to any other noncompliance.
- 92. Any penalty accruing under this Section shall be due and payable within fourteen (14) days of the receipt of a written demand by EPA. Payment of such penalty shall be made by certified check payable to the Hazardous Substances Superfund, and mailed to the following address with a notation of the docket number of this Order:

Region I
U.S. Environmental Protection Agency
Attn: Superfund Accounting
P.O. Box 360197 M
Pittsburgh, PA 15251

A copy of the certified check shall be sent to the Remedial Project Manager within five (5) days of payment. Nothing in this Order shall be construed as prohibiting, altering, or in any way limiting the ability of the EPA to seek any other remedies or sanctions available by virtue of Settling Defendants' violation of this Order or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(1) of CERCLA.

XXIV. <u>INDEMNIFICATION</u>

93. The United States does not assume any liability by entering into this Order or by virtue of any designation of the Respondents as EPA's authorized representatives under Section 104(e) of CERCLA. The Respondents shall indemnify, save and hold harmless the United States, the State, and their officials, agents, employees, contractors, subcontractors, or representatives for or from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of the Respondents, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Order, including, but not limited to, any claims arising from any designation of the Respondents as EPA's authorized representatives under Section 104(e) of CERCLA. Further, the Respondents agree to pay the

United States and the State all costs they incur including, but not limited to, attorneys fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States or the State based on negligent or other wrongful acts or omissions of the Respondents, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Order. Neither the United States nor the State shall be held out as a party to any contract entered into by or on behalf of the Respondents in carrying out activities pursuant to this Order. Neither the Respondents nor any such contractor shall be considered an agent of the United States or the State.

XXV. WAIVER OF SETTLEMENT CONFERENCE

94. In consideration of the communications among the Respondents and EPA regarding the terms of this Order prior to its issuance, Respondents hereby agree that there is no need for a settlement conference prior to the effective date of this Order.

XXVI. COVENANTS NOT TO SUE

A. EPA's Covenant Not to Sue

95. In consideration of the actions that will be performed and the payments that will be made by the Respondents under the terms of this Order, and except as specifically provided in

Section XXVII of this Order (EPA's Reservation of Rights), EPA covenants not to sue or to take administrative action against the Respondents pursuant to Sections 106 and 107(a) of CERCLA for the matters addressed in this Order. These covenants not to sue shall take effect upon notification by EPA that the Respondents have completed the design of the Removal Action in accordance with this Order. These covenants not to sue are conditioned upon the complete and satisfactory performance by the Respondents of their obligations under this Order. These covenants not to sue extend only to the Respondents and do not extend to any other person. Respondents are not released from liability, if any, for any actions taken beyond the terms of this Order regarding the construction, implementation, and post-removal site control of this removal action, other removal actions, remedial investigation/feasibility studies related to any operable unit, remedial design/remedial action related to any operable unit, operation and maintenance of any remedial action, or activities arising pursuant to Section 121(c) of CERCLA, 42 U.S.C. § 9621(c).

B. Respondents' Covenant Not to Sue

96. Except for purposes of enforcement of this Order and for purposes of Respondents' private agreement(s) among themselves, the Respondents covenant not to sue and agree not to

assert any claims or causes of action against one another with respect to the design of the Removal Action.

- 97. The Respondents hereby covenant not to sue and agree not to assert any claims or causes of action against the United States or the State with respect to this Order including, but not limited to, the following:
 - a. Any direct or indirect claim for reimbursement from the Hazardous Substance Superfund (established pursuant to the Internal Revenue Code, 26 U.S.C. § 9507) through CERCLA Sections 106(b)(2), 111, 112, 113 or otherwise any other provision of law;
 - b. Any claim against the United States, including any department, agency or instrumentality of the United States under CERCLA Sections 107 or 113 related to the Site;
 - c. Any claim under the Tucker Act, 28 U.S.C. § 1491, or at common law, arising out of or relating to access to, institutional controls on, or response activities undertaken at the Site; and
 - d. Any claims arising out of response activities at the Site. However, the Respondents reserve, and this Order is without prejudice to, actions against the EPA based on negligent actions taken directly by the EPA (not including oversight or approval of the Respondents' plans or activities) that are brought pursuant to any statute other than CERCLA and for which the waiver of sovereign immunity is found in a statute other than CERCLA.

Nothing in this Order shall be deemed to constitute preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

XXVII. EPA'S RESERVATION OF RIGHTS

98. EPA's covenants not to sue set forth in Paragraph 95 do not pertain to any matters other than those expressly specified

in Paragraph 95. EPA reserves, and this Order is without prejudice to, all rights against the Respondents with respect to all other matters, including but not limited to, the following:

- a. Claims based on a failure by the Respondents to meet a requirement of this Order;
- b. Liability arising from the past, present, or future disposal, release, or threat of release of Waste Materials outside of the Site;
- c. Liability for damages for injury to, destruction of, or loss of natural resources, including the costs of assessing such injury, destruction, or loss;
- d. Criminal liability;
- e. Liability for any response actions at the Site that are not required to be performed by the Respondents pursuant to this Order;
- f. Liability for any costs that the United States has incurred or will incur related to the Site; and
- q. Liability for violations of any law.
- 99. In the event EPA determines that the Respondents have failed to perform any portions of the design of the Removal Action in an adequate or timely manner, EPA may perform any and all portions of the Removal Action design as EPA determines necessary. The Respondents may invoke the procedure set forth in Section XXII (Dispute Resolution) to dispute EPA's determination that the Respondents failed to perform any portions of the design of the Removal Action in an adequate or timely manner as arbitrary and capricious or otherwise not in accordance with law.
 - 100. Notwithstanding any other provision of this Order, EPA

retains all authority and reserves all rights to take any and all response actions authorized by law.

XXVIII. CONTRIBUTION PROTECTION

101. With regard to claims for contribution against the Respondents relating to the design of the Removal Action, the Respondents are entitled to such protection from contribution actions or claims as is provided by Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2).

XXIX. OTHER CLAIMS

- 102. Except as expressly provided in Section XXVI (Covenant Not to Sue), nothing in this Order shall constitute a satisfaction of or release from any claim or cause of action against the Respondents or any person not a party to this Order, for any liability such person may have under CERCLA, other statutes, or the common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106(a) and 107(a) of CERCLA, 42 U.S.C. §§ 9606(a) and 9607(a).
- 103. The Respondents waive any direct or indirect claim for reimbursement from the United States or the Hazardous Substance Superfund (established pursuant to the Internal Revenue Code, 26 U.S.C. 9507) under Sections 106(b), 107, 111, 112 or 113 of CERCLA, 42 U.S.C. §§ 9606(b), 9607, 9611, 9612 or 9613, or any other provision of law.

104. No action or decision by EPA pursuant to this Order shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXX. AMENDMENTS

- 105. Except as provided in Paragraph 106 below, modifications to the Order or SOW may be made only after written notification to, and written approval of, the EPA Geographic Section Chief, after a reasonable opportunity for review and comment by the State. All such modifications shall be made by written agreement between EPA and the Respondents, after a reasonable opportunity to review and comment on the proposed modifications by the State.
- 106. Modifications to the schedules specified in the Order for completion of the Work, or modifications to the SOW extending the time for the Respondents' performance of any requirement under this Order or SOW may be made only after written notification to, and written approval of, the RPM. All such modifications shall be made by written agreement between EPA and the Respondents, after a reasonable opportunity to review and comment on the proposed modifications by the State.
- 107. No informal advice, guidance, suggestion, or comment by the EPA regarding matters addressed by this Order or SOW or regarding any reports, plans, specifications, schedules, or other written material submitted by the Respondents shall be construed

as relieving the Respondents of their obligation to obtain such formal approval as may be required by this Order.

XXXI. OTHER APPLICABLE LAWS

- 108. Except as otherwise provided pursuant to Paragraph 109 herein and Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), all activities undertaken by the Respondents pursuant to this Order shall be performed in accordance with the requirements of all applicable federal and state laws and regulations. Such laws shall include, but not be limited to, the laws relating to occupational health and safety and worker's compensation.
- 109. In accordance with 40 C.F.R. § 300.415(i), all activities undertaken on the Site by the Respondents pursuant to this Order shall attain applicable or relevant and appropriate requirements under federal and state environmental laws as identified in Attachment 11 of the Action Memorandum (ARARS).

XXXII. COMMUNITY RELATIONS

- 110. EPA shall be responsible for preparing a Community Relations Plan and conducting a community relations program. The Respondents and the contractor engaged to conduct the design of the Removal Action under this Order shall, consistent with the Community Relations Plan:
 - a. Attend and participate in public meetings regarding the Site, to the extent specified by the RPM;
 - b. Prepare fact sheets concerning the Site and activities conducted under this Order for submission to the RPM, to the extent specified by the RPM; and,

c. Provide timely and appropriate responses to inquires from the public at the request of the RPM.

XXXIII. PLACE AND MANNER OF NOTICE

all documents, including reports, approvals, disapprovals, written notice, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Order, shall be directed through the Respondents' Project Coordinator and EPA's RPM. All such documents submitted pursuant to this Order shall be sent to the RPM and the State at the following addresses or to such other addresses as EPA hereafter may designate in writing:

Edward M. Hathaway Remedial Program Manager U.S. Environmental Protection Agency Office of Site Remediation and Restoration (HBT) J.F.K. Federal Building Boston, MA 02203

and

Stan Corneille, State Site Manager Waste Management Division Vermont Department of Environmental Conservation 103 South Main Street Waterbury, VT 05676

XXXIV. <u>EFFECTIVE DATE</u>

112. This Order shall be effective five (5) days after EPA mails written notice to David P. Rosenblatt, Esquire of Burns & Levinson, 125 Summer Street, Boston, Massachusetts 02110-1624, a designated representative of the Bennington Landfill Site PRP

Group, that the Order has been signed by the Director of the EPA Office of Site Remediation and Restoration.

The undersigned representatives of the Respondents-certify that								
they are fully authorized to enter into the terms and conditions								
of this Order and bind the parties they represent to this								
document.								
Agrees this day of, 1996.								
Respondent								
Ву								
Title								
Address:								
Telephone No								

IT	IS SO	ORDERED	AND	AGREED	THIS	D	AY OF _		, 1996	
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BY:										
DI:										
		a M. Murp				•				
	Offic	ce of Sit	te Re	mediati	ion ar	nd Rest	oration	1		
	U.S.	EPA - Ne	ew En	gland F	Region	ı				

Appendix A

Respondents

B.Co. (formerly known as Bijur Lubricating Corp.)

Eveready Battery Company, Inc.

Johnson Controls Battery Group, Inc.

Textron, Inc.

Town of Bennington, Vermont

Appendix C

List of Potential De Minimis Settlors

Add, Inc.

Bennington College

Bennington Iron Works (GCDC)

Chemfab Corporation

Sibley Manufacturing Co., Inc./CLR Corporation

Masco/Schmelzer

Southwestern Vermont Medical Center

Central Vermont Public Service Corporation

Triangle Wire & Cable

State of Vermont Agency of Transportation

Vermont Bag & Film, Inc.

U.S. Tsubaki

Appendix B

Non-Time Critical Removal Action Design Statement of Work Bennington Landfill Superfund Site

I. INTRODUCTION AND PURPOSE

This non-time-critical removal action (NTCRA) Statement of Work (SOW) defines the response activities and deliverables that the Respondents shall perform/submit in order to implement the Work required under the Administrative Order on Consent for Removal Action Design (EPA Region I Docket No. CERCLA-I-96-1014) (the "NTCRA Order") at the Bennington Landfill Superfund Site in Bennington, Vermont (the "Site"). The activities described in this SOW are based upon the United States Environmental Protection Agency (EPA) Action Memorandum for the Site signed by the EPA Regional Administrator, Region I, on December 23, 1994.

II. DEFINITIONS

The following definitions shall apply to this SOW:

- A. All definitions provided in Section IV of the NTCRA Order are incorporated herein by reference.
- B. "Design" shall mean an identification of the technology to be used for the Removal Action and its performance and operational specifications, in accordance with all applicable federal, state, and local laws, including, but not limited to:
 - 1. all computations used to size units, determine the appropriateness of technologies, and the projected effectiveness of the NTCRA;
 - scale drawings of all system layouts identified above and including, but not limited to, excavation cross-sections, and well crosssections;
 - 3. quantitative analyses demonstrating the anticipated effectiveness of the NTCRA Design to achieve the Performance Standards;
 - 4. technical specifications which detail the following:
 - a. size and type of each major component; and
 - b. required performance criteria of each major component;

- 5. specifications on the Demonstration of Compliance ambient air monitoring including equipment, monitor locations, and data handling procedures; and
- 6. specifications of Institutional Controls (deed restrictions, access, land easements and/or other controls as required), to be supplied with the construction plans and specifications.
- C. "EPA Approval" or "EPA Review and Approval" shall mean the procedures specified in Section XIII.A of the NTCRA Order.
- D. "Respondents' Certification" shall mean the procedures specified in Section XIII.B of the NTCRA Order.

III. SELECTED NON-TIME-CRITICAL REMOVAL ACTION

Section V.A.1 of the Action Memorandum specifies the Non-Time-Critical Removal Action for the Site. Based upon the Action Memorandum, listed below are the components of the NTCRA which shall be designed by the Respondents:

- a composite barrier low permeability cap with drainage controls;
- the excavation of contaminated soils and sediments exceeding action levels from the drainage pond and underdrain discharge pipe area and consolidating them with the existing landfill;
- a gas management system;
- a comprehensive air monitoring program immediately following the installation of the cap to ensure that no unacceptable air emissions are occurring;
- a system to collect leachate and groundwater from the existing underdrain and treating it off-site to remove contaminants;
- a structure that isolates groundwater in the water table aquifer from the landfill waste material; and
- Institutional Controls, including implementation of access restrictions, deed restrictions, land-use restrictions or easements and/or other controls including a fence shall prohibit the future use of the Site in any manner that would compromise the integrity of the cap and its related collection systems.

IV. PERFORMANCE STANDARDS

The Respondents shall design the NTCRA in compliance with the NTCRA Order, this SOW, and to meet the performance standards and all statutes and regulations identified in Section V.A.5 and Attachment 11 (ARARS Tables) of the Action Memorandum. The performance standards of the Action Memorandum are incorporated herein by reference.

The Respondents shall design the NTCRA to achieve the following Performance Standards for the NTCRA at the Site:

- A. LANDFILL CAP: The landfill cap shall be designed to meet the performance requirements of the Resource Conservation and Recovery Act ("RCRA") Subtitle C regulations specified in 40 C.F.R. §§ 264.19, 264.310 and 264.111. These standards are incorporated by reference into the Vermont Hazardous Waste Management Act, 10 V.S.A. Chapter 159. The cap shall also be designed to meet the requirements of the following EPA technical guidance documents: "Final Covers on Hazardous Waste Landfills and Surface Impoundments" (EPA/530-SW-89-047, July 1989); "Construction Quality Management for Remedial Action and Remedial Design Waste Containment Systems" (EPA/540/R-92/073, October 1992) and Quality Assurance and Quality Control for Waste Contaminant Facilities" (EPA/600/R-931/182). The composite barrier cap shall achieve the following minimum requirements:
 - 1. <u>Base layer</u> shall be composed of unclassified fill material. This material is used to establish the base grade of the landfill. The landfill shall be graded and sloped to attain the minimum slope steepness practical, to reduce erosion. Benches and terraces shall be installed to control surface water and within cap drainage. The existing landfill cap may be incorporated into this layer if appropriate.
 - 2. <u>Gas collection layer</u> shall be designed to be installed if deemed necessary and appropriate by EPA. Additional data is required during the design phase. Respondents shall provide EPA and VTDEC with landfill gas sample results collected during the design phase, necessary to determine if federal or state air quality standards are exceeded (see ARARs table). At this time, there is no gas data available to make the determination that a passive system will protect public health. If federal or state air quality standards are exceeded, an active gas system shall be installed.

The active gas management system shall utilize vertical wells or an equivalent method to increase the flow of landfill gases to the collection system. The

active gas management system shall involve the placement of a sufficient number of vertical gas collection wells and vents to prevent the buildup of methane and to provide for the collection and treatment of landfill gases containing hazardous substances. The active gas collection system shall also be designed to prevent or minimize, to the extent practicable, the escape of landfill gases containing hazardous substances.

If federal and state air standards are not exceeded, based on reliable landfill gas sampling results, the passive gas management system shall involve installing filtered gas vents into the cap. A sufficient number of filtered gas vents shall be installed: (1) to prevent the harmful buildup of methane and/or carbon dioxide, and (2) to provide for the collection and treatment of landfill gases containing hazardous substances. The passive gas venting system shall be operated and maintained as part of the maintenance of the cap. Landfill gas treatment, to be designated during the design process, shall continue until EPA, after a reasonable opportunity for review and comment by the State, determines that treatment of the landfill gas is no longer necessary.

If EPA, after a reasonable opportunity for review and comment by the VTDEC, determines a passive gas management system is appropriate, the Respondents shall include a gas collection layer with a minimum thickness of 30 cm and will be located between the lowpermeability soil layer and the base layer. Materials used in the construction of the gas layer shall be coarse-grained, porous materials such as those used in the drainage layer. Geosynthetic materials may be substituted for granular materials in the vent layer, which channel gases to filtered vertical risers, if it can be shown that they provide a level of performance equivalent to a 30 cm granular layer. Equivalence is based upon the ability of the design to efficiently remove any gases produced, resist clogging, prevent infiltration, withstand expected shallow sand and gravel pressures, and function under the stresses of construction and operation. The number of filtered vertical risers through the cover shall be limited to the greatest degree possible. The filtered vertical risers shall be located at high points in the crosssection and designed to prevent water infiltration through and around them. Alternative designs shall also be considered such as perforated vertical collector pipes penetrating to the bottom of the landfill. Several cover penetrations may be required

for each stand pipe. The pipes will be securely sealed to the low-permeability layer.

- 3. Bottom low hydraulic conductivity layer shall be designed to minimize potential leakage through the top low hydraulic conductivity geomembrane, into the landfill. This layer acts as a safeguard to the geomembrane and is generally made of clay or a geosynthetic clay liner (GCL). This layer shall be designed to achieve a maximum hydraulic conductivity no greater than 1 x 10^{-7} cm/sec. In areas where clay or GCLs cannot be used due to steep slopes, the bottom low hydraulic conductivity layer shall be comprised of at least 2 feet of material that is more resistant to sliding than clay. In these areas, the bottom layer shall designed to have a minimum hydraulic conductivity of 1 x 10 cm/sec yet has similar low hydraulic conductivity characteristics to clay. Such lower standard shall apply only for areas that are too steep for clay or a GCL and which cannot be regraded and only after EPA approval, after a reasonable opportunity for review and comment by VTDEC.
- 4. Top low hydraulic conductivity layer shall be a synthetic barrier. This shall be designed to be the main barrier which prevents water infiltration from entering the landfill. This synthetic barrier shall be a type of flexible geomembrane to be determined during design. The synthetic membrane shall be at least 40 ml thick and shall be selected to prevent infiltration and minimize the potential for sliding.
- 5. Drainage layer shall be design to be placed above the synthetic barrier to allow water to drain off the synthetic barrier and to prevent ponding of water over the synthetic barrier. This layer shall be composed of either 12 inches of sand with a minimum hydraulic conductivity of 1 X 10⁻² cm/sec or a synthetic material with a transmissivity of at least 3 x 10⁻⁵ m²/sec. The granular material shall be no coarser than 3/8 inch (0.95 cm) and classified as SP; shall be smooth and rounded and shall contain no debris that could damage the underlying flexible membrane liner (FML) nor fines that might lessen permeability.
- 6. <u>Top layer</u> of the cap will be the vegetative cover. This layer shall be a minimum of 24 inches, the top six inches to be topsoil or equivalent material for the establishment of a well vegetated cover over the landfill. The top layer shall: (i) provide frost protection; (ii) provide adequate water-holding capacity to attenuate rainfall/snowmelt infiltration to

the drainage layer and to sustain vegetation through dry periods; and (iii) provide sufficient thickness to allow for expected long-term erosion losses. Deep rooted plants that could damage the drainage and barrier layers shall not be allowed to grow on the cover. A filter fabric shall be placed between the top layer and the drainage layer to minimize fill material from clogging the drainage layer.

Wetlands impacted by the cap construction or soil excavation activities shall be minimized. Additional wetland mitigation investigations shall be incorporated into the design, utilizing accurate determination of actual wetlands affected by cap construction. Predicted water table lowering in wetland areas induced by the upgradient groundwater isolation system shall be determined as part of the design. Construction methodology shall include process operations, construction timetables and environmental controls designed to minimize impacts. Wetland boundaries shall be well-defined prior to construction activities. Potential impacts shall be outlined prior to activities and realized impacts mitigated. Restoration or replication of any degraded wetland areas shall be address as part of the detailed wetland impacts mitigation plan.

- B. EROSION AND SEDIMENT CONTROLS: Surface water drainage controls shall be designed to prevent erosion of the cap and shall be capable of handling the 100 year, 24 hour storm event, to the extent practicable. As determined by the final NTCRA design, drainage channels shall be designed for installation in certain areas on top and perimeter of the landfill cap to channel runoff away from the landfill. The final slopes shall be designed to minimize the formation of erosion rills and gullies and to limit total erosion to less than 2.0 tons/acre/year.
- C. <u>SURFACE WATERS:</u> The point of compliance for any point source surface water releases resulting from this action, consistent with the NCP, shall be the point or points where the release enters the surface water body (wetland south of the landfill, ponds A, B, and C and Hewitt Brook). Any point source discharge to a surface water shall comply with the NPDES program under Section 402 of the federal Clean Water Act, and the Vermont Water Quality Standards and storm water discharge requirements promulgated pursuant to 10 VS Chapter 47 (Vermont Water Resources Board, effective July 1994).
- D. <u>AIR:</u> The point of compliance for air, consistent with the NCP, shall be the point(s) of the maximum exposed individual, considering reasonably expected use of the Site

and surrounding area. The maximum exposed individuals include: (1) adjacent residents; (2) operation and maintenance personnel; and (3) individuals working at the transfer station facility. The gas collection system shall not allow for an unacceptable risk of exposure to the maximum exposed individuals by controlling the release of landfill gas and treating collected landfill gas. The gas collection and treatment system shall also comply with federal and state air regulations, including but not limited to Vermont Air Pollution Control (10 VSA Chapter 5) and the federal Clean Air Act.

- E. EXCAVATION AND CONSOLIDATION: The design shall include the excavation and consolidation of all surface and subsurface soils and exposed sediments exceeding the PCB action level of 1,000 ppb as referenced in Section II.A.4 of the Action Memorandum within the waste management unit. design shall require that all excavated soils and sediments be hauled and consolidated to a location predetermined by EPA within the existing landfill limits 30 to 60 feet above the water table and covered over by the composite barrier cap. The design must require that PCB contaminated soils and sediments be placed within the existing landfill limits in order to achieve a level of performance equivalent to incineration is achieved as required by the Toxic Substances Control Act (TSCA) (40 CFR § 761.60(a)). Areas where PCBs exceed the action levels include the drainage pond area, underdrain area (soils and sediments located in the area of the underdrain discharge pipe) and soils and sediments east of the drainage pond area. The EE/CA estimated a volume of approximately 1,500 cubic yards of soils and sediments that exceed action levels in the cost estimate.
- F. <u>LEACHATE/GROUNDWATER ISOLATION</u>: An upgradient groundwater isolation system shall be designed to meet the response action objectives by preventing additional groundwater movement into the landfill mass and preventing the migration of leachate and groundwater beyond the boundary of compliance. The design shall require that Upgradient groundwater (west and north) be intercepted utilizing a slurry wall with an upgradient toe drain or interceptor trenches to redirect flow. Prior to implementation of an upgradient groundwater isolation system the design shall present the rationale used to assess the impact of the upgradient groundwater diversion system on the wetland south of the landfill, ponds, and in the Hewitt Brook drainage area.
- G. <u>COLLECTED LEACHATE AND GROUNDWATER</u>: To the extent practicable and with full compliance of the performance standards specified in the EE/CA, the leachate collection system may be used to meet the response action objective of

preventing the discharge from the underdrain from impacting groundwater and soil. The design of such leachate collection utilizing the existing leachate collection piping network may be accomplished by including a sump at the downgradient end of the existing landfill underdrain system. The EE/CA anticipates that leachate collection is expected to be unnecessary after the first year due to upgradient leachate/groundwater isolation. The design shall include a description of the decision making criteria to determine that collection and treatment of leachate is no longer necessary. In addition, provisions shall be made for the collection and treatment of discharge, if Site data indicate discharge collection must continue beyond the one year anticipated by the EE/CA.

As part of the design, the collected underdrain discharge shall be transferred to equalization or storage tanks. These tanks shall serve to equalize influent concentrations and provide storage prior to implementation of the chosen off-site treatment option. Off-site treatment technologies for collected underdrain discharge shall be designed to meet the performance standards for collected leachate and groundwater treated and disposed off-site including but not limited to: "RCRA Regulatory Status of Contaminated Groundwater" (EPA, November 13, 1986); Procedures for Planning and Implementing Off-Site Response Actions: (40 C.F.R. §300.440; "CERCLA Site Discharges to POTWs Guidance Manual" (EPA 540 G-90 005); and pre-treatment requirements promulgated pursuant to section 403 of the federal Clean Water Act. Discharge to the Bennington POTW (Publicly Owned Treatment Works) may be evaluated as a potential option for the treatment of the collected underdrain discharge.

H. <u>INSTITUTIONAL CONTROLS</u>: The design shall describe the Institutional Controls that ensure the long-term integrity of the landfill cap, leachate collection and treatment, leachate/groundwater isolation, landfill gas management systems. Access, deed restrictions, land-use restrictions or easements and/or other controls including a fence shall prohibit any activity at the Site which would interfere with or compromise the landfill cap and other components of the removal action. Such controls shall also require EPA and VTDEC approval prior to the commencement of any future activities at the Site which may impact the landfill cap or its related systems.

V. NTCRA DESIGN

The Respondents shall develop a final design for the selected NTCRA as described in the Action Memorandum and this SOW that meets the performance standards specified in Section IV of this SOW. This section describes the Respondents responsibilities for submitting deliverables and conducting project meetings during design.

A. DELIVERABLES

The Respondents shall submit the following deliverables to EPA and the VTDEC during the design of the selected NTCRA, pursuant to the schedule in Attachment A. Any modification of the schedule in Attachment A shall be subject to EPA approval, after a reasonable opportunity for review and comment by VTDEC. Each submitted deliverable shall require EPA Approval, after a reasonable opportunity for review and comment by VTDEC, or Respondents' Certification, whichever applies, pursuant to the schedule in Attachment A and the procedures in Section XIII of the NTCRA Order.

1. <u>DESIGN PROGRESS REPORTS</u>

On the 15th calendar day of each month, and until EPA approval of the 100% NTCRA Design, the Respondents shall submit Design Progress Reports to EPA and the VTDEC. Design Progress Reports may be combined with the monthly progress reports required under the Administrative Order by Consent for Remedial Investigation/Feasibility Study (EPA Region I CERCLA Docket No. I-91-1093) and shall be submitted with Respondents' Certification. The reports shall summarize all activities that have been conducted in the month preceding the Progress Report and those planned for the next two months. The Progress Reports shall also identify problems encountered and/or changes to the schedule, and shall summarize the results of sampling and tests and other data received by the Respondents.

2. <u>CONCEPTUAL DESIGN LETTER REPORT</u>

Within 60 days of the effective date of the NTCRA Order the Respondents shall submit a Conceptual Design Letter Report to EPA and the VTDEC. The Conceptual Design Letter Report shall be submitted with Respondents'
Certification, and shall include, at a minimum:

a. an outline of the NTCRA Design and the Demonstration of Compliance Plan:

- b. a work plan for any pre-design studies;
- c. preliminary drawings of the 3:1 and 3-5% slope sections of the cap, slurry wall, leachate/groundwater collection system, surface water controls and retention ponds in plan view and cross-section; and
- d. The design basis for the composition and thickness of each layer of the cap presented in letter format, including a determination of the appropriate gas control technology and supporting information and an estimate of settlement.

3. 100% DESIGN MEETING FOR GROUNDWATER ISOLATION SYSTEM; SEDIMENT CONSOLIDATION; AND LEACHATE COLLECTION SYSTEM

Within 165 days of the effective date of the NTCRA Order, the Respondents shall submit the 100% Design for the groundwater isolation system, sediment consolidation, and leachate collection system to EPA
for Review and Approval, after reasonable opportunity for review and comment by the VTDEC. The design submittal shall include, but not be limited to:

- a. the final design report for each of the above components including the design basis for each of the above components and the associated plans and specifications in reproducible format;
- b. drawings on reproducible mylar; and
- c. the Technical Specification for each of the above components which shall include, at a minimum, the items identified in Attachment E.

4. INTERMEDIATE DESIGN LETTER REPORT

Within 270 days of the effective date of the NTCRA Order the Respondents shall submit an Intermediate Design Letter Report to EPA and VTDEC. The Intermediate Design Letter Report shall be submitted with <u>Respondents' Certification</u>, and shall include, at a minimum:

a. a revised outline of the NTCRA Design and the Demonstration of Compliance Plan, including

sample checklists and a list of testing requirements, based upon EPA and VTDEC comments;

- b. The results of any pre-design studies;
- c. pre-final drawings of the 3:1 and 3-5% slope sections of the cap in plan view and cross section including surface drainage controls and retention ponds, slurry wall and upgradient interceptor trenches, anchor trenches, leachate/groundwater collection system, and gas collection system;
- d. a description of the design basis for each layer and/or component of the NTCRA, including settlement evaluation, stability calculations, and the HELP model assessment to evaluate infiltration through the cover system. The stability assessment shall include an assessment of the stability of the cover system, waste material, and surrounding slopes. Each key section of the stability analysis should include a discussion of the: (1) performance criteria for each failure mode; (2) soil conditions, including loading and seepage conditions; and (3) determination of factor of safety and indicate the slope failure mode. The methods to perform the above analysis shall be presented;
- e. a discussion of how all identified ARARs will be complied with; and
- f. draft technical specifications.

5. 100% NTCRA DESIGN

Within 120 days of the Respondents submittal of the Intermediate Design Letter Report to EPA, the Respondents shall submit the 100% NTCRA Design for <u>EPA Review and Approval</u>, after reasonable opportunity for review and comment by the VTDEC. Design plans for individual components of the NTCRA may be submitted separately from the cap design. However, the design submittal for the cap shall address 100% of the total Design for each component of the NTCRA including, but not limited to:

a. the final design report including the design basis for each component and the associated plans and specifications in reproducible

format;

- b. drawings on reproducible mylar; and
- c. the NTCRA Technical Specification which shall include, at a minimum, the items identified in Attachment E.

6. <u>DEMONSTRATION OF COMPLIANCE PLAN</u>

In accordance with the NTCRA Schedule (Attachment A), the Respondents shall submit the Demonstration of Compliance Plan for <u>EPA Review and Approval</u>, after reasonable opportunity for review and comment by the VTDEC. The Demonstration of Compliance Plan shall describe in detail all activities that shall be conducted to comply with and to demonstrate compliance with all performance standards, including but not limited to all applicable, relevant and appropriate requirements (ARARs). The Demonstration of Compliance Plan shall also include a Field Sampling Plan as specified in Attachment C and a Quality Assurance Project Plan as specified in Attachment D.

For ARARs, the Demonstration of Compliance Plan shall:

- a. specify the statute;
- b. specify the citation of the ARAR;
- c. identify if the ARAR is state or federal;
- d. summarize the requirements of the ARAR;
- e. specify in detail all activities that shall be conducted to comply with the ARAR; and,
- f. specify in detail all activities that shall be conducted to demonstrate compliance with the ARAR.

When sampling and analysis is conducted to demonstrate compliance, the Demonstration of Compliance Plan shall specify:

- a. sampling locations;
- b. sampling frequency;
- c. sampling methods;
- d. analytical methods;
- e. quality assurance and quality control activities; and
- e. statistical analysis and/or modeling and/or other data interpretation techniques.

<u>Landfill Cap</u>: The Demonstration of Compliance Plan shall include all of the construction quality assurance testing required to demonstrate that the NTCRA was

properly implemented. The construction quality assurance component in the Demonstration of Compliance Plan shall include, at a minimum; (1) checklists for establishing that the required tests and inspections were performed; (2) a standard operating procedures for all field and laboratory tests; (3) the quality assurance and quality control plan for all field and laboratory tests; and (4) erosion and sediment control plans. The construction quality assurance component of the Demonstration of Compliance Plan shall be based upon the following guidance documents: Construction Quality Assurance for Hazardous Waste Land Disposal Facilities, (EPA 530-SW-86-031, October 1986; and "Technical Guidance Document Quality Assurance and Quality Control for Waste Containment Facilities" (EPA/540/R-93/182, September 1993).

<u>Surface Waters</u>: The Demonstration of Compliance Plan shall specify the method by which any surface water point source discharge shall be evaluated.

Air: As part of the Air Section of the Demonstration of Compliance Plan, the Respondents shall specify the methods by which initial compliance with the VT Air Pollution Control Regulations shall be determined. Demonstration of Compliance Plan shall also specify the method by which the ambient air shall be evaluated after the construction of the cap is complete to demonstrate that the landfill gas does not pose an unacceptable risk (an excess cancer risk outside the 10-4 to 10-6 risk range or a non-carcinogenic hazard index greater than 1) to the maximum exposed individuals as specified in Section IV.D of this SOW. This shall include the calculation of the exposure point concentration for each of the potentially exposed individuals based upon the average and maximum concentrations for each contaminant detected in the ambient air monitoring. The data shall be presented in a format that shall allow EPA to perform a risk assessment for the air pathway. The Demonstration of Compliance Plan shall describe the model that shall be used to develop the exposure point concentrations, if necessary.

Collected Leachate and Groundwater: The Demonstration of Compliance Plan shall specify the method by which compliance with the requirements and policies specified in Section IV.D. of this SOW shall be determined, including but not limited to, periodic evaluations to determine whether the collected leachate and ground water are RCRA hazardous wastes. The Plan shall identify the receiving facility and back-up facilities

for any hazardous substances, pollutants, or contaminants transported off-site. The Plan shall also identify the process for receiving EPA approval prior to the Respondents' use of an off-site facility.

7. WINTER STABILIZATION PLAN

By October 30th of each field season prior to the approval of the Post-Removal Site Control Plan, the Respondents shall submit a Winter Stabilization Plan to EPA and VTDEC. This plan shall describe the practices and procedures that will be used by the Respondents to prevent erosion of the landfill and excessive sediment discharge to the surface water and wetlands.

B. <u>DESIGN PROJECT MEETINGS</u>

The Respondents and their Contractor shall periodically meet with EPA and the VTDEC during the design phase to discuss the status of the design, present the results of any investigations, and discuss any issues associated with the development of design.

At least one week prior to each such periodic meeting, the Respondents shall submit to EPA and the VTDEC: (i) an agenda for the meeting; (ii) a summary of the issues that will be discussed; and (iii) any supporting information, including any specific information required for the meeting as detailed below. The following is a list of mandatory meetings to be held during the design phase:

1. <u>DESIGN KICK-OFF MEETING</u>

Within two weeks of the effective date of the NTCRA Order, the Respondents shall schedule a design kick-off meeting. The purpose of this meeting is to allow the EPA, VTDEC, and Respondents design teams to meet.

2. <u>VTDEC Meeting</u>

Within 30 days of the effective date of the NTCRA Order, the Respondents shall schedule a meeting with the VTDEC to discuss the issues relating to the potential discharge of the collected leachate to the Bennington POTW, the discharge of the groundwater diverted by the isolation trench, and the process for determining the type of gas management system. The Respondents shall invite EPA to this meeting.

3. <u>CONCEPTUAL DESIGN MEETING</u>

Within 2 weeks of the Respondents submission of the Conceptual Design to EPA and VTDEC, the Respondents shall hold a Conceptual Design Meeting. During the Conceptual Design Meeting, the Respondents shall give a presentation of the Work Plan for pre-Design Studies to address the gas sampling required in Section IV.A, test borings for the upgradient diversion system, landfill settlement, leachate treatability analysis, and the conceptual design of the selected NTCRA based on any completed pre-design investigations and the Conceptual Design Letter Report.

4. <u>100% DESIGN MEETING FOR GROUNDWATER ISOLATION</u> <u>SYSTEM, SEDIMENT CONSOLIDATION, AND LEACHATE</u> <u>COLLECTION SYSTEM</u>

Within 2 weeks of the Respondents submission to EPA and VTDEC of the 100% Design for the groundwater isolation system, sediment consolidation, and leachate collection system, the Respondents shall hold a 100% design meeting. At this meeting the Respondents shall present the 100% design for these components of the NTCRA. The Respondents shall also describe the results of the predesign studies.

5. <u>INTERMEDIATE</u> DESIGN MEETING

Within 270 days of the effective date of the NTCRA Order, the Respondents shall hold a Intermediate Design Meeting. During the Intermediate Design Meeting, the Respondents shall present the intermediate design. The Respondents shall present the material submitted in the Intermediate Design Letter Report and identify any changes made since the conceptual design.

6. <u>100% NTCRA DESIGN MEETING</u>

There shall be two 100% NTCRA Design Meetings. The first meeting shall occur no later than the submittal date of the 100% NTCRA Design. The Respondents shall provide an overview of the design and identify any major changes from the intermediate design. The second meeting shall be held no later than fourteen days after the Respondents' receipt of EPA comments regarding the 100% NTCRA Design. During this meeting, the Respondents shall present any issues that have arisen

from comments received on the 100% NTCRA Design and options for resolving the issues.

7. <u>DEMONSTRATION OF COMPLIANCE PLAN MEETING</u>

During this meeting, the Respondents shall present any issues that have arisen from comments received from EPA and VTDEC on the Demonstration of Compliance Plan and options for resolving the issues. This meeting may be combined with the second 100% NTCRA Design Meeting, but in any event shall be held no later than twenty-one days after the receipt of EPA comments on the Demonstration of Compliance Plan.

EPA and/or the Respondents may also schedule additional meetings as necessary to discuss any issues that arise during design.

ATTACHMENT A NTCRA SCHEDULE

* Requires EPA Approval

** Requires Respondents' Certification

Month	Deliverable/Meeting	Due Date
1	Kick-off meeting between EPA, VDTEC, and Design Contractor	within 2 weeks of the effective date of the NTCRA Order
	**Design Progress Reports	15th calendar day of each month until EPA approval of 100% NTCRA Design
1	Meeting with VTDEC to discuss POTW discharge/air controls	within 30 days of the effective date of the AO
2	Submit **Conceptual Letter Report to EPA and VTDEC	within 60 days of the effective date of the AO
3	Conceptual Design Meeting	with 2 weeks of the Conceptual Design Letter Report
4 & 5	Monthly Project Mtg.	To be set by EPA
6	submit draft *Final Design of the Groundwater Isolation System; Sediment consolidation; and leachate collection system to EPA and VTDEC	with 165 days of the effective date of the AO
6	Final Design Meeting for Groundwater Isolation; Sediment Consolidation; and Leachate Collection	within 2 weeks of the Final Design submittal
7,8	Monthly Project Meetings	To be set by EPA
9	submit **Intermediate Design Letter Report for Landfill Cap, Surface Drainage System, and Gas Management System to EPA and VTDEC	within 270 days of the effective date of the AO
9	Intermediate Design Meeting	within 2 weeks of Intermediate Design Letter Report Submittal

10,11 ,12	Monthly Project Meetings	To be set by EPA
,13 ,	submit *100% NTCRA Design of Landfill Cap, Surface Drainage System, and Gas Management System and Demonstration of Compliance Plan to EPA and VTDEC	within 120 days of submittal of Intermediate Design Letter Report

ATTACHMENT B

DELIVERABLES REQUIRING RESPONDENTS' CERTIFICATION

I. PROGRESS REPORTS

Design Progress Reports shall include all of the requirements listed in Section V.A.1 of this SOW.

II. MEETING LETTER REPORTS

The Conceptual Design Letter Report shall include, at a minimum, the information described in Section V.B.1. of this SOW. The Intermediate Design Letter Report shall include, at a minimum, the information described in Section V.B.2 of this SOW.

ATTACHMENT C

FIELD SAMPLING PLAN COMPONENT OF DEMONSTRATION OF COMPLIANCE PLAN

The overall objectives of the Field Sampling Plan (FSP) are as follows:

- to document specific objectives, procedures, and rationales for fieldwork and sample analytical work;
- 2. to ensure that sampling and analysis activities are necessary and sufficient; and
- 3. to provide a common point of reference for all parties to ensure the comparability and compatibility of all objectives and the sampling and analysis activities.

The following critical elements of the FSP shall be described for each sample medium, as necessary, (e.g., ground water, surface water, soil, sediment, air, and biota) and for each sampling event:

- sampling objectives (There can be many objectives for example engineering related (well yields, zone of influence), demonstration of attainment, five year review, etc.);
- 2. data quality objectives, including data uses and the rationale for the selection of analytical levels and detection limits (see <u>Data Quality Objectives</u>

 <u>Development Guidance for Uncontrolled Hazardous Waste Site Remedial Response Activities; OSWER Directive 9355.07, March 1987); Also, <u>Guidance for Data Useability in Risk Assessment; EPA/540/G-90-008, October 1990.</u></u>
- 3. site background update, including an evaluation of the validity, sufficiency, and sensitivity of existing data;
- 4. sampling locations and rationale;
- 5. sampling procedures and rationale and references;
- 6. numbers of samples and justification;
- 7. numbers of field blanks, trip blanks, and duplicates;
- 8. sample media (e.g., ground water, surface water, soil,

sediment, air, and buildings, facilities, and
structures, including surfaces, structural materials,
and residues);

- 9. sample equipment, containers, minimum sample quantities, sample preservation techniques, maximum holding times;
- 10. instrumentation and procedures for the calibration and use of portable air, soil-, or water-monitoring equipment to be used in the field;
- 11. chemical and physical parameters in the analysis of each sample;
- 12. chain-of-custody procedures must be clearly stated (see EPA 330/9-78 001-R) May 1978, revised May 1986;
- 13. procedures to eliminate cross-contamination of samples (such as dedicated equipment);
- 14. sample types, including collection methods and if field and laboratory analyses will be conducted;
- 15. laboratory analytical procedures, equipment, and detection limits;
- 16. equipment decontamination procedures;

The FSP must establish the framework for all anticipated field activities (e.g., sampling objectives, evaluation of existing data, standard operating procedures) and contain specific information on each round of field sampling and analysis work (e.g., sampling locations and rationale, sample numbers and rationale, analyses of samples). During the NTCRA, the FSP shall be revised as necessary to cover each round of field or laboratory activities. Revisions or a statement regarding the need for revisions shall be included in each deliverable describing all new field work.

The FSP shall include provisions requiring notification of EPA and the VTDEC, at a minimum, four weeks before field sampling events. The Respondents shall provide EPA and VTDEC at least one week notice for non-analytical engineering analysis samples. The FSP shall also allow split, replicate, or duplicate samples to be taken by EPA (or their contractor personnel), VTDEC, and by other parties authorized by EPA. At the request of EPA or VTDEC, the Respondents shall provide these samples in appropriately pre-cleaned containers to the government representatives.

Identical procedures shall be used to collect the Respondents' samples and the parallel samples unless otherwise specified by EPA or VTDEC. The following guidance documents shall be followed in developing the FSP, including:

- 1. <u>Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA</u> (OSWER Directive 9355.3-01, EPA/540/G-89/004, October 1988);
- 2. <u>Data Quality Objectives for Remedial Response</u> <u>Activities Development Process</u>, EPA/540/G-87/003, (OSWER Directive 9355.0-7B, March 1987);
- 3. <u>Data Quality Objectives for Remedial Response</u>
 <u>Activities, example scenario: RI/FS Activities at a site with contaminated Soil and Ground Water</u> (OSWER Directive 9355.0-7B, EPA/540/G-87/002, March 1987);
- 4. Test Methods for Evaluating Solid Waste,

 Physical/Chemical Method (EPA Pub. SW-846, Third Edition);
- 5. Analytical methods as specified in <u>CFR 40 CFR Parts</u>

 136, 141.23, 141.24 and 141.25 and Agency manuals documenting these methods; and
- 6. <u>Statement of Works for Inorqanic and Organic Analyses</u>, EPA Contract Laboratory Program.
- 7. <u>Guidance for Data Useability in Risk Assessment</u>, EPA/540/G-90-008, October 1990.
- 8. <u>Ecological Assessment of Hazardous Waste Sites: A field and Laboratory Reference</u>, EPA/600/3-89013, March 1989.

ATTACHMENT D

QUALITY ASSURANCE PROJECT PLAN COMPONENT OF DEMONSTRATION OF COMPLIANCE PLAN

The Quality Assurance Project Plan (QAPjP) shall document in writing site-specific objectives, policies, organizations, functional activities, and shall specific quality assurance/quality control activities designed to achieve the data quality objectives (DQOs) of the NTCRA. The QAPjP developed for this project shall document quality control and quality assurance policies, procedure, routines, and specifications. All project activities throughout the NTCRA shall comply with the QAPjP. All QAPjP and sampling and analysis objectives and procedures shall be consistent with Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans (EPA, 1983 - EPA, QAMS- 005/80, 1980). All analytical methods shall be consistent with applicable EPA analytical protocols and methods.

The 16 basic elements of the QAPjP plan are:

- title page with provision for approval signatures of principal investigators;
- 2. table of contents;
- 3. project description;
- 4. project organization and responsibility;
- 5. quality assurance objectives for measurement data, in terms of precision, accuracy, completeness, representativeness, and comparability;
- 6. sampling procedures;
- 7. sample custody;
- 8. calibration procedures and frequency;
- 9. analytical procedures, which must be EPA approved or equivalent methods;
- 10. data reduction, validation and reporting;
- 11. internal quality control checks and frequency;
- 12. performance and system audits and frequency;
- 13. preventive maintenance procedures and schedules;

- 14. specific routine procedures to be used to assess the precision, accuracy, and completeness of data and to assess specific measurement parameters involved;
- 15. corrective action; and
- 16. quality assurance reports to management.

As indicated in EPA/QAMS-005/80, the above list of essential elements must be considered in the QAPjP for the NTCRA. If a particular element is deemed not relevant to the project, the reasons for such determination must be provided.

Information in a plan other than the QAPjP may be cross-referenced clearly in the QAPjP provided that all objectives, procedures, and rationales in the documents are consistent, and the reference material fulfills the requirements of EPA/QAMS-005/80. Examples of how this cross-reference might be accomplished can be found in the Data Quality Objectives for Remedial Response Activities, Development Process, EPA/540/6-87/003 (OSWER Directive 9355.0-7B), March 1987 and the Data Quality Objectives for Remedial Response Activities, Example Scenario, EPA/540/G-87/004 (OSWER Directive 9355.0-7B), March 1987. EPA-approved analytical methods or alternative methods approved by EPA shall be used, and their corresponding EPA-approved guidelines shall be applied when they are available and applicable.

The QA/QC for any laboratory used during the NTCRA shall be included in the QAPjP. When this work is performed by a contractor to the private party, each laboratory performing chemical analyses shall meet the following requirements:

- 1. be approved by the State Laboratory Evaluation Program, if available;
- 2. have successful performance in one of EPA's National Proficiency Sample Programs (i.e., Water Supply or Water Pollution Studies or the State's proficiency sampling program);
- 3. be familiar with the requirements of 48 CFR Part 1546 contract requirements for quality assurance; and
- 4. have a QAPjP for the laboratory including all relevant analysis. This plan shall be referenced as part of the contractor's QAPjP.

The Respondents shall certify that all validation of data

was performed by an independent person according to Region I's Laboratory Data Validation Functional Guidelines for Evaluating Organic and Inorganic Analyses (amended as necessary to account for the differences between the approved analytical methods for the project and the Contract Laboratory Procedures (CLP) procedures). These approved methods shall be contained in the QAPjP. The independent person shall not be the laboratory conducting the analyses and should be a person familiar with EPA Region I data validating procedures. The independent person performing the validation shall insure that the data packages are complete and, all discrepancies have been resolved if possible, and the appropriate data qualifiers have been applied. The Respondents shall keep the complete data package and make it available to EPA and the VTDEC on request. The complete data package must include the following:

- o Narrative stating method used and explanation of any problems
- O Tabulated summary forms for samples, standards and QC
- o Raw data for samples, standards and OC
- o Sample preparation logs and notebook pages
- o Sample analysis logs and/or notebook pages
- O Chain of custody sample tags
- o An example calculation for every method per matrix.

ATTACHMENT E

GENERAL REQUIREMENTS FOR THE TECHNICAL SPECIFICATIONS COMPONENT OF THE NTCRA DESIGN

The general requirements section of the technical specification shall describe how the Respondents will manage the project to complete the NTCRA as required under the SOW and the NTCRA Order. As part of the technical specifications the Respondents shall require the following tasks:

- 1. Provide for the security of government and private property on the Site;
- 2. Prevent unauthorized entry to the Site, which might result in exposure of persons to potentially hazardous conditions:
- 3. Establish the location of a field office for on-site activities;
- 4. Provide contingency and notification plans for potentially dangerous activities associated with the NTCRA;
- Monitor airborne contaminants released by Site activities which may affect the local populations;
- 6. Communicate to EPA, VTDEC, and the public the organization and management of the NTCRA, including key personnel and their responsibilities;
- 7. Provide a list of Respondents' contractors and subcontractors and description of their activities and roles;
- 8. Provide for the proper disposal of materials used and wastes generated during the NTCRA (e.g., drill cutting, extracted ground water, protective clothing, disposable equipment). These provisions shall be consistent with the off-site disposal requirements of CERCLA § 121(d)(3), RCRA, and applicable state laws. The Respondents, or their authorized representative, or another party acceptable to EPA and VTDEC shall be identified as the generator of wastes for the purpose of regulatory or policy compliance;
- 9. Provide a description of the project staff and communication strategy;
- 10. Provide the mechanism for identifying and notifying EPA and VTDEC of non-conformance with the design and field

Attachment E - 1

change requests; and

11. Provide traffic controls and community notification strategy.